

AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of the claims in the present application

Claims as amended:

1. (Currently Amended) A coding method of an excitation vector ~~waveform of a~~ of a stochastic codebook ~~that is used in a coding apparatus and that is divided into a plurality of channels capable of outputting a plurality of excitation vector waveforms, wherein said the~~ coding method associates comprising:

associating an excitation vector waveform candidate of a predetermined channel with a waveform number of an excitation vector waveform candidate of another channel, or an operation result of a numerical value used to acquire the waveform number;

~~searching for and makes a code of an excitation vector waveform searched for by means of a predetermined algorithm a code of an that minimizes coding distortion using the associated excitation vector waveform candidate of the predetermined channel and the excitation vector of a codebook waveform candidate of another channel; and~~

determining a code of the excitation vector of the stochastic codebook using a code of the excitation vector waveform obtained by the searching.

2. (Currently Amended) The coding method according to claim 1, wherein ~~searching for~~ an excitation vector waveform ~~is comprises~~ searching by ~~searched for by means of~~ a search algorithm of n-fold loops (~~where n is a number of channels~~) that changes an excitation vector waveform candidate within a loop in accordance with an excitation vector waveform candidate outside a loop, ~~where n is a number of channels~~.

3. (Original) The coding method according to claim 1, wherein a codebook is a stochastic codebook used in CELP.

4. (Original) The coding method according to claim 3, wherein a stochastic codebook is an algebraic codebook, and an excitation vector waveform candidate is represented by a pulse position.

5. (Currently Amended) The coding method according to claim 1, wherein ~~an excitation vector waveform candidate of a predetermined channel is associated by a multiplication the operation result is a remainder operation result of a number representing an excitation vector waveform candidate of another channel.~~

6. (Currently Amended) The coding method according to claim 5, wherein ~~a multiplication the remainder~~ operation result is associated with an index of a pulse position candidate group indicating an excitation vector waveform candidate of a predetermined channel .

7. (Currently Amended) The coding method according to claim 5, wherein ~~a multiplication the remainder~~ operation result is associated with a pulse position indicating an excitation vector waveform candidate of a predetermined channel.

8. (Currently Amended) The coding method according to claim 6, wherein association is performed by addition of ~~multiplication remainder~~ operation results.

9. (Original) A speech coding apparatus that codes an excitation vector of a codebook by means of the coding method according to claim 1.

10. (Original) A speech decoding apparatus that performs decoding of an excitation vector of a codebook corresponding to the coding method according to claim 1.